TANDY WALKER'S 2nd A CLASS BOMBER-30 to 40

FW: 30 Class A Bomber Silked Vertical Tail
The two pictures below shows the three vertical tail components before and after the first layer of silk covering has been applied. They have been water shrunk, but not doped yet. I finished covering them Saturday morning, but have been incapacitated ever since. I have never had back problems before, I must have developed what I think may be a pinched nerve because I have been in bed since Saturday afternoon. I am taking aspirin and using a hot pad, but I can’t seem to get any relief from pain. Hopefully, this problem will resolve itself sometime this week............Tandy

FW:31 Doping In Rainy Weather
It started raining here a couple of days ago and it is still raining. I started doping the rudder and fin, but even though the dope was drying to the touch, the silk remained slightly wrinkled due to the coolness and dampness. So I am using a low power heat lamp to dry the dope and shrink the silk taunt between coats. The picture below shows the third coat of dope curing in front of the heat lamp. I set a timer for 15 minutes per side and it is working out pretty
FW:32 Class A Bomber Silked Fuselage

I finished applying the first silk covering to the fuselage and have brushed on the first critical coat of nitrate dope. Critical because of the care that must be taken to prevent the dope from globbing up under the raw silk. The silk covering is quite taunt and bonded well in the fillet areas as the the three pictures below show. Today I will apply a couple more coats of dope and then cut out the silk in all of the screw and hatch openings (speaking of hatches, note the three silked covered access hatches in the foreground of the first picture).

At this point, I have to stop and clean up the work table in preparation for doing my federal taxes. Therefore, my progress will be interrupted for a few days. However, I will continue to apply coats of dope periodically.............Tandy
I have started double silking the Class A Bomber fuselage and vertical tail. First I did the three access hatches. Then after applying the second coat of silk and two coats of nitrate dope on the rudder and sub rudder, but not the fin, I decided to take a picture for comparison. Below, is a picture of the three components of the vertical tail. The rudder and
sub rudder have two silk coverings and fin has only one....................Tandy

FW:34 Class A Bomber Double Silked

I have finally finished the second silk covering on the fuselage, fin, rudder, and sub rudder of the Class A Bomber as shown in the first picture below. Don’t let anybody kid you, the second silk covering is more difficult than the first to get on with the grain straight and no bubbles between the two layers. I have put two coats of nitrate dope on the second silk covering so far.

The second picture shows the two centering pins used to alignment the sub rudder along the bottom edge of the longeron on the fuselage. The third picture shows the sub rudder installation. Notice that the fin and rudder have been clamped to align the rudder to the fin. The the sub rudder is epoxied in place over the centering pins and also hinged to the rudder to insure alignment while the epoxy is drying............Tandy
I thought I was being so careful installing the sub rudder on the Bomber only to discover I had the grain in the balsa of the sub rudder itself turned wrong#@%$. The grain should have been running vertical, but instead I had it running horizontal (see first picture below). The makes the sub rudder very weak and subject to being broke off.

So the day before yesterday morning, I removed the faulty sub rudder by cutting it off, leaving the centering pins in tact, and then carefully trimming and sanding down the bonded interface along the bottom longeron to make it smooth once again. During the past two days, I have made a completely new sub rudder with the grain running vertical as should be and doubled silk covered and doped it. This afternoon, I bonded the new correct sub rudder to
the fuselage one more time (see second picture below)……..Tandy Walker…..

**FW:36 Class A Bomber Revised Sub Rudder**

Here is a comparison of the two installed sub rudders. The first picture has the wrong grain orientation in the sub rudder and the second picture has the correct orientation. A lot of work for such a little change, but the sub rudder it is now as it should be. Tandy Walker

**FW:37 Class A Bomber Wing Covered**

Being retired, you would think that I would have had plenty of time to finish this Class A
Bomber project by now. It seems, however, this is not the case! I have had so many interruptions lately (some self imposed, some required, and some unexpected) that I am not making much headway on my building schedule at all. I said after I retired from a cost and schedule driven engineering career, that I was not going to work to any kind of a schedule ever again. It is becoming obvious to me now why some kind of a schedule is important. If you don’t have one, you find that you don’t ever get anywhere! At any rate, I have finally managed to complete covering the 415 sq. in. wing of the Class A Bomber. I used UltraCote Lite transparent red with transparent yellow inserts. 1/4" black stripes are used to highlight the red to yellow to red transitions. You may recognize this color scheme used by my my friend Ray Matthews on all of his Fubar free flights.

(1) The first picture below is a recap of the detailed wing structure I last reported to you on.
(2) The second picture, taken essentially from the prospective, shows the covered wing.
(3) The third picture is a good planform shot of the covered wing. Note the small number "39" out on the right wing tip. This is channel number of the radio frequency used in this aircraft.
(4) I included the fourth picture to show the changing spanwise shear web pattern of both the front and rear spars.

Now, once again I have to stop modeling for a while and perform some everyday tasks such as change oil and grease my mini van, redo the packing in some of the outside faucets which spray all over you when you turn them on :-(, pick up a tree pole saw and trim the spring "suckers" sprouting from our trees, and set up my new colored printer that I go for Christmas for pity sakes!
I will report again when I manage to get back to working on the Bomber..........Tandy
I have managed to get the red trim on the fin of the little Bomber as the two pictures below. Will put trim on the fuselage this afternoon. It is raining today and is in the forecast through tomorrow night. Once it clears up, I plan to air brush a final thin fuel proof over coat on the fuselage, hatch doors, fin, and rudder............. Tandy
FW:39 Class A Bomber Paint Stands

I have spent the morning making paint stands (or fixtures) to hold the fuselage, three access hatches, fin, and rudder while I airbrush a thin fuel proof top coat on them. See pictures below. Once painted, the parts can be sat aside to dry overnight in these fixtures.................
FW:40 Class A Bomber Weight and Balance Check

Since the air brushed coat of Hobby Poxy on the fuselage, fin, and rudder has thoroughly dried during the last several days, I decided to do a trial assembly on the Class A Bomber today (see attached picture) to check the weight and balance. The only thing missing is the covering of the stab and elevator. I first weighed the Bomber with the 270 mah 40 gram NiCad ignition battery pack on my Acculab scales at 760 grams (26.81 ounces). Then I checked the C.G. and it was right on the desired 50% balance point, without the covering on the stab and elevator of course.

The wing area was calculated to be 415.55 sq. in. from the scaled plans, so for the required minimum 10 ounce wing loading, it must weigh at least \(10 \times \frac{415.55}{144} = 28.79\) ounces. Therefore, the ship is 1.98 ounces underweight! I purchased a light weight 340 mah 9 gram Li-Po Lithium battery for use on the ignition system instead of the NiCad pack, but the model is already too light and will be slightly tail heavy with the addition of the covering on the stab and elevator, so I will not use it after all.

I will add the appropriate amount of lead inside the engine’s back plate and radial mount to trim the weight and C.G. at 28.8 ounces and 50%, respectively. So now I will disassemble the Bomber, cover the stab and elevator over the next day or so, and reassemble the model. Before installing the engine, it has to be bench mounted and broke-in as it is a NIB Shilen Old Timer .19.

More later............Tandy